Pembroke Water Works Experience W/TCR

Small Utility Perspective on TCR Implementation Issues

Pembroke Water Works and similar systems

- Five Wells with an average depth of 85’
- Pumping about 450GPM
- Non-chlorinated system
- 2200 service connections
- About 46 miles of water main
- Pipe was installed in 1896
- System population is around 5500

Sampling for TC

- Monthly Monitoring Requirements
- Collecting the required Samples
- Site Selection
- Additional samples Non-compliance

Positive Bacteria

- What happens when we have one or two?
- Review distribution map
- Collect the repeat samples for each positive sample.
- Repeat samples are present
- Typically we collect more samples
- Add chlorine to the system for about two weeks
- Repeat samples are absent
- We may collect additional samples
- Chlorine is not added to the system

Public Notification

- Business Manager prepares the public notification and it is sent out
- Cost for Pembroke Water Works is about $750.00 each time. Plus loss of public confidence.
- Inform the employees about the notification
- Monitor phone calls about the issue

Problems with TCR

- Total coliform what does it tell us?
- Was it sampler error?
- Laboratory Error
- System contamination?
- Why repeat sample if we can’t use them to tell us if the system is contaminated or not? Most important use it to define an MCL violation.

Public is Confused about the Notification they receive

- We tell them this is important information about their drinking water.
- Then we tell them this is not an emergency.
- Why are they getting this notice?
- Public begins to lose confidence in their water system.

What is the problem with the rule?

- Total coliform should not trigger an MCL Violation.
- Repeat samples are not allowed to be considered to confirm if there is system contamination or not.
- When determining if there is an MCL violation shouldn’t there be some sort of confirmation?

Pembroke Street Fire